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Sequence Listing was accepted.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2010; month=3; day=30; hr=11; min=3; sec=6; ms=676; ]

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Application No: 10561108 Version No: 2.0

**Input Set:**

**Output Set:**

**Started:** 2010-03-22 18:28:05.814  
**Finished:** 2010-03-22 18:28:12.571  
**Elapsed:** 0 hr(s) 0 min(s) 6 sec(s) 757 ms  
**Total Warnings:** 22  
**Total Errors:** 18  
**No. of SeqIDs Defined:** 22  
**Actual SeqID Count:** 22

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
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E 257	Invalid sequence data feature in <221> in SEQ ID (1)
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E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
E 257	Invalid sequence data feature in <221> in SEQ ID (3)
E 257	Invalid sequence data feature in <221> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)

**Input Set:**

**Output Set:**

**Started:** 2010-03-22 18:28:05.814  
**Finished:** 2010-03-22 18:28:12.571  
**Elapsed:** 0 hr(s) 0 min(s) 6 sec(s) 757 ms  
**Total Warnings:** 22  
**Total Errors:** 18  
**No. of SeqIDs Defined:** 22  
**Actual SeqID Count:** 22

Error code	Error Description
E 257	Invalid sequence data feature in <221> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
E 257	Invalid sequence data feature in <221> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
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W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20) This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> BURKART, MICHAEL D.  
LACLAIR, JAMES J.

<120> COMPOSITIONS AND METHODS FOR ANALYSIS AND MANIPULATION OF  
ENZYMES IN BIOSYNTHETIC PROTEOMES

<130> 26774-14255/US

<140> 10561108  
<141> 2006-05-11

<150> PCT/US2004/019568

<151> 2004-06-17

<150> 60/479, 344

<151> 2003-06-17

<160> 22

<170> PatentIn version 3.5

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<223> Description of Artificial Sequence: Synthetic  
consensus sequence

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<221> MOD\_RES  
<222> (3)..(3)  
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<223> Asp, Asn, Glu, Lys, His or Ser

<220>

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<222> (8)..(8)

<223> Any amino acid except Pro, Cys, Phe or Tyr

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<221> MOD\_RES

<222> (9)..(9)

<223> Ser, Thr, Ala, Gly, Cys, Pro, Gln, Leu, Ile, Val, Met or Phe

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<222> (10)..(10)

<223> Leu, Ile, Val, Met, Ala, Thr or Asn

<220>

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<222> (11)..(11)

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<220>

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<220>

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<222> (14)..(15)

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<222> (16)..(16)

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<210> 2  
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<220>  
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<400> 2  
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<210> 3  
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<212> PRT  
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<220>  
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<220>  
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<222> (2)..(2)  
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<220>  
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<210> 4  
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<212> PRT  
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Phe Xaa Pro Arg Leu Gly  
1 5

<210> 5  
<211> 5  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<220>

<221> MOD\_RES

<222> (2)..(2)

<223> Gly, Ser, Thr or Val

<400> 5

Phe Xaa Pro Arg Leu

1 5

<210> 6

<211> 16

<212> PRT

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peptide

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1 5 10 15

<210> 7

<211> 16

<212> PRT

<213> Artificial Sequence

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peptide

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<211> 16

<212> PRT

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1 5 10 15

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1 5 10 15

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<210> 14  
<211> 16  
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<220>  
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<210> 15  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic peptide

<400> 15  
Glu Leu Gly Gly Asp Ser Ile Lys Ala Ile Gln Val Ser Thr Arg Leu  
1 5 10 15

<210> 16  
<211> 16  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Synthetic peptide

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Asp Leu Gly Gly His Ser Leu Lys Ala Met Thr Val Val Phe Gln Val  
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<210> 17  
<211> 16  
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<220>  
<223> Description of Artificial Sequence: Synthetic peptide

<400> 17  
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1 5 10 15

<210> 18  
<211> 16  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Synthetic peptide

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Gln Ile Gly Gly His Ser Leu Lys Ala Met Ala Val Ala Ala Gln Val  
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<210> 19  
<211> 16  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Synthetic peptide

<400> 19  
Glu Ile Gly Gly His Ser Leu Lys Ala Met Asn Val Ile Thr Gln Val  
1 5 10 15

<210> 20  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic peptide

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<210> 21

<211> 16  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

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<210> 22  
<211> 80  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Synthetic  
polypeptide

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Thr Cys Glu Lys Asn Ile Val Ala Cys Glu Arg Asp Leu Ala Ala Ser  
20 25 30

Cys Pro Asp Arg Asp Leu Phe Arg Ala Phe Thr Ser Gly Met Ile Ile  
35 40 45

Arg Lys Leu Arg Gln Arg Asp Gly Ile Asp Ile Asp Thr Pro Leu Gln  
50 55 60

Ala Leu Gln Lys Leu Ala Ala Gln Gly Tyr Gln Asp Val Ala Ile Gln  
65 70 75 80